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## Patent Abstracts of Japan

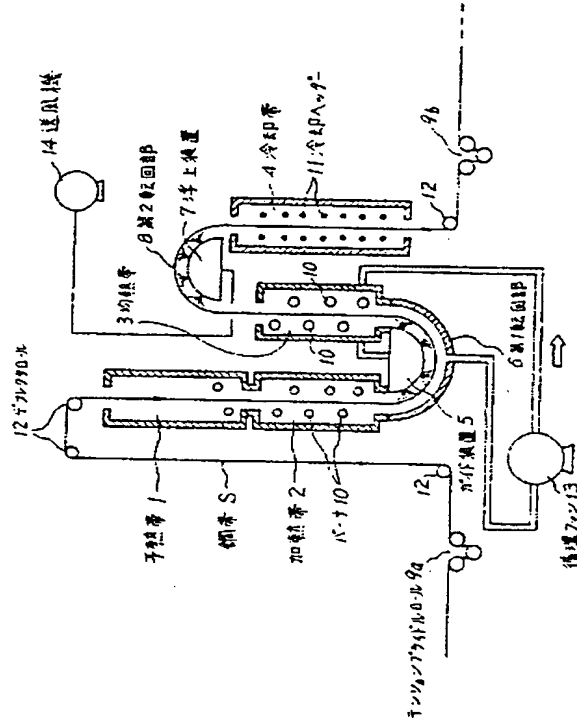
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APPLICANT : KAWASAKI STEEL CORP;

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TITLE : CONTINUOUS ANNEALING FURNACE  
 FOR STEEL STRIP



ABSTRACT : PURPOSE: To eliminate the development of thermal deformation and pickup flaw and to enable high speed annealing by arranging a guide device passing a steel strip under non-contacting by gas injection at a first turning part in a vertical type furnace and means for floating up and supporting the steel strip at a second turning part.

CONSTITUTION: The vertical type furnace is constituted by parallel setting preheating zone 1 and heating zone 2, soaking zone 3 and cooling zone 4. The first turning part 6 is arranged between the heating zone 2 and the soaking zone 3 and the gas injection to radius direction is executed to the steel strip along the guide device 6 to force U-shape passing of the steel strip. The second turning part 8 is arranged between the soaking zone 3 and the cooling zone 4 and the steel strip is floated up and supported by injection gas pressure with a floating up device 7 to force reverse U-shape passing of the steel strip. Tension bridle rolls 9a, 9b are arranged at the inlet side of the preheating zone 1 and the outlet side of the cooling zone 4 to give the steel strip the tension. By this method, even if the steel strip is treated at high speed, canoeing does not occur and meandering of the steel strip does not occur.

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